SINGLE AND MULTILAYER WAVEGUIDES AND FABRICATION PROCESS

Abstract of the Disclosure

An optoreflective structure for reflecting an optical signal following a path defined by an optical waveguide comprising a first cladding layer having a first planar cladding surface; a waveguide disposed on the first cladding layer; and a second cladding layer disposed on the waveduide and having a second planar cladding surface. The first cladding layer, the second cladding layer and the waveguide terminate in a generally dove-tailed structure having a beveled planar surface. An optoreflector is disposed on the beveled planar surface for a changing direction of an optical signal passing through the waveguide. A method for producing an optoreflective structure comprising providing a substrate supporting a first cladding layer having a first planar cladding surface; disposing a waveguide material on the first cladding layer; and forming on the waveguide material a second cladding layer having a second planar cladding surface. The method also comprises forming a beveled planar surface in the first cladding layer, in the waveguide material, and in the second cladding layer; and depositing an optical signal-changing surface on the beveled planar surface.